Note: This Model is Out of Production.
For Reference Use Only.

TCR™ Hunter

Single Shot Rifle
Instructions on the Use and Care

This booklet contains information that is essential to the safe use and maintenance of the TCR Hunter Rifle or TCR '87 Single Shot Rifle. Throughout this manual, reference will be made to the TCR '87 Rifle. The operation and maintenance of the TCR Hunter Rifle is identical. **You must read this material in its entirety and fully understand its significance before you can safely use this firearm.** If a TCR Hunter or '87 Rifle is loaned or sold (by an individual or dealer) this booklet must accompany the firearm. Replacement booklets are available at no charge from our factory.

Thompson/Center Arms Co., Inc, P.O. Box 5002, Farmington Road, Rochester, New Hampshire 03867

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Know Your Thompson/Center TCR Rifle Before You Attempt To Use It!

Designed as a Hunting/Sports Rifle, the TCR is uniquely different from other firearms. Its single shot, break open action is relatively simple to understand and safe when the required ingredients of "common sense" and "safe gun handling" are applied to its use and care.

However, do not assume that a familiarity with other firearms has equipped you with a knowledge of "safe gun handling" as these words now apply to your new TCR. Each gun design is different from another and each functions accordingly.

All machines, be they chain saws, automobiles, lawnmowers or firearms are built to function as **mindless mechanical slaves. They serve only as well as your intellect dictates.** Carefully used your chain saw will cut up a winter's supply of firewood. Carelessly used your chain saw will cut other things with able willingness. A firearm is no different - it is equally nonselective as to target or purpose.

Examine your TCR Rifle at the time of purchase. Be certain that it is unloaded and undamaged as Thompson/Center Arms Company cannot control the handling of this product after it leaves our factory. The dealer will be pleased to assist you in making this examination and will answer any questions. **If you are unfamiliar with firearms and safe gun handling procedure, seek further instruction by attending courses run by your local gun clubs, NRA approved instructors or other qualified organizations.**

In as much as the responsibility for the use of a firearm rests with its user, you must understand the mechanics before you can shoulder the responsibility for its use. That is what this booklet is all about.

YOU MUST READ THIS MATERIAL BEFORE USING YOUR TCR RIFLE.

GENERAL RULES FOR USE AND HANDLING OF THE *TCR'87*™ HUNTER MODEL RIFLE AND SHOTGUN

1. **Know the TCR '87 before you attempt to use it.** The overall functioning and safety features of the TCR '87 are different from other firearms. You must read and understand the working of the TCR '87 as explained in this booklet before attempting to use it.

2. **Always point the muzzle of your TCR '87 downrange.** The possibility of accidental discharge is a constant danger when using a firearm. If the muzzle is pointed downrange, away from yourself, other people, domestic animals or property, then there can be no injury or damage from an accidental discharge.

3. **Never load your TCR '87 until you are actually engaged in hunting or target shooting.** A loaded firearm requires your complete concentration. Never load your TCR '87 until you are actually in the woods away from other members of your hunting party and directing your complete attention to the firearm. Always unload the firearm before you return to camp or to your vehicle. If you should encounter other hunters in the woods, unload the rifle before approaching them and do not reload it until they have safely left the vicinity.

Never hand a loaded TCR '87 to another person. Never store a loaded TCR '87 in your home. Never cross a fence, climb a tree, jump a ditch or engage in any activity which distracts your attention while holding or carrying a loaded TCR '87. Never attempt to clean a loaded TCR'87 .

When using a TCR'87 on the range, never load it until you are ready to fire. Failure to observe these rules may result in an accidental discharge which can cause injury or death to yourself or others.

4 **Never transport or carry a loaded TCR'87 in a vehicle.** Due to the large number of firearm accidents which occur in or near a vehicle, adherence to this rule is extremely important. In most states, **game laws strictly forbid the carrying of a loaded firearm in a vehicle or the taking of game from a road or vehicle. The rules of safe gun handling and common sense coupled with your responsibility as an ethical sportsman prohibit this practice. Never, under any circumstances, carry a loaded TCR'87 in a vehicle of any type.** Be certain that you are a safe distance away from the vehicle, road and companions before loading. When returning, unload the rifle a safe distance away from the vehicle and companions.

5 **Be physically fit and mentally alert when using your TCR'87.** The use of your TCR'87 involves forceful physical actions which require strength and concentration. Never use alcoholic beverages or drugs before shooting or handling your TCR'87. Never use your TCR'87 when you are overly tired. If you use medication or have medical implants consult your physician before using your TCR'87.

6 **Know the function of your TCR'87 before firing.** Be sure the gun is loaded with the proper ammunition. Be sure the breech is securely locked. Be sure the barrel is clear of obstructions (including excess oil, mud, dirt, snow or any foreign material). Failure to observe this rule may result in damage to the gun and injury to the shooter or bystander.

7 **Be sure of your target.** Never fire your TCR'87 unless there is a backstop behind your target. Never fire your TCR'87 in the field unless you have a clear view of your target. Never fire at targets which appear on the crest of a hill or above the horizon line. Never fire at a noise or movement in the brush. If hunting in an area where there are other hunters, always know where members of your party and other parties are located. Never fire your TCR'87 if there is a possibility that another hunter is downrange. Never shoot at flat, hard surfaces such as rocks or water. The projectile may ricochet off these surfaces causing injury or death.

8. **Use binoculars for target identification.** Never aim through a telescopic sight at an unknown target. Use binoculars to identify game and raise the rifle only when you are certain of your target and ready to fire.

9. **Respect the TCR'87.** Used properly, your TCR'87 will give you years of pleasure. Used improperly, carelessly or abused, your TCR'87 is a dangerous instrument and is capable of causing serious injury, death or property damage. Always treat your TCR'87 as if it were loaded. Do not drop your TCR'87 or allow it to be struck a blow. Dropping or striking may cause movement of and/or damage to internal parts in such a manner as to cause an accidental discharge.

10. **Protect your eyes and ears when firing your TCR'87.** Always wear shooting glasses to protect your eyesight from air borne particles and ear protectors to guard against hearing loss due to loud noise when firing your TCR'87.

AMMUNITION

STANDARD FACTORY LOADED CARTRIDGES

The TCR '87 design provides for the use of interchangeable barrels which are chambered for a variety of factory loaded cartridges. The proper cartridge for each barrel is clearly marked by its standard industry designation on the top left side of each barrel. These barrels should be used with high quality, commercially manufactured ammunition with a packaging and head stamp designation that corresponds exactly to the barrel marking.

Several TCR'87 barrels are available through the T/C Custom Shop which are chambered for custom "wildcat" cartridges. These are for those qualified people who are totally experienced in reloading procedures. The novice should not attempt to use these cartridges until he or she has developed the required background and knowledge. Thompson/Center Arms is not responsible for damage or injury resulting from the use of non-standard or reloaded cartridges nor the use of cartridges other than those for which the TCR'87 was factory chambered. Faulty or improperly constructed ammunition, poor brass, incompatible components or the improper use or selection of components or bore

obstructions can create chamber and barrel pressures that are far in excess of those for which the TCR'87 was designed. Soft or improper primers or cases can rupture resulting in the uncontrolled release of gas within the action. Any and/or all of these adverse conditions can result in a complete or partial rupture of the firearm which can cause injury and/or death to yourself or others. **If you have any questions concerning the proper ammuntion for your TCR'87, write or call our factory. Do not fire your TCR'87!**

CUSTOM ALTERATIONS & CONVERSIONS

TCR'87 Rifles, Shotguns, or accessory barrels which are subjected to custom alteration or conversion other than those performed by the Thompson/Center Custom Shop are not covered by this warranty. **Thompson/-Center does not endorse or recommend any type of custom alteration other than those performed by the Thompson/Center Custom Shop.** Responsibility for other conversions rests solely with the gunsmith performing the conversion. If this work is done improperly or without proper judgement, the firearm can rupture or malfunction causing injury or death to the shooter or bystanders.

Never Load or Attempt to Use the *TCR'87*™ Hunter Model Rifle or Shotgun Until You Become Completely Familiar With Its Operation!

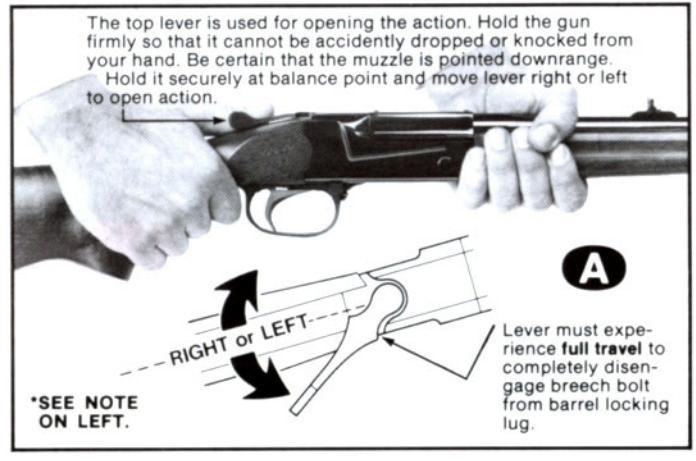
OPENING, SIMULATING LOADING & CLOSING THE *TCR'87*™ ACTION

Hold the firearm at its balance point as pictured in Photo "A". Bear in mind that the TCR'87 is designed for hunting and sport use. Its proper operation requires the same concentration and care that would normally be given to a quality firearm. **Never allow the barrel to drop open without support and never snap the action closed in a one-handed manner.**

Use the thumb of your (right or left) hand to push the top lever all the way to the side. **Remember that this lever must experience full travel before the breech bolt will completely disengage and the action will open**

***NOTE: If the top lever on the TCR'87 does not move from side to side easily, check the cross bolt safety. The gun will not open if the hammer is in fired position and the safety is "on". Simply release the safety (allowing the sear to move) and your TCR'87 will open.**

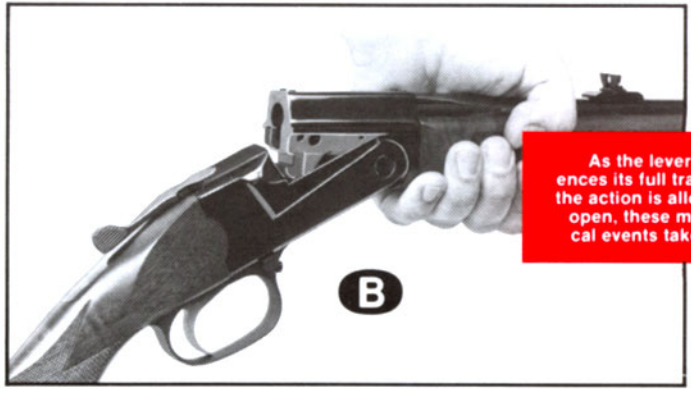
As the action opens, exposing the chamber, a full series of mechanical events will have taken place. It is necessary for you to understand and to appreciate the significance of these moving parts if you are to use your TCR'87 correctly.


The top lever is used for opening the action. Hold the gun firmly so that it cannot be accidently dropped or knocked from your hand. Be certain that the muzzle is pointed downrange. Hold it securely at balance point and move lever right or left to open action.
A
RIGHT or LEFT
*SEE NOTE ON LEFT.
Lever must experience **full travel** to completely disengage breech bolt from barrel locking lug.

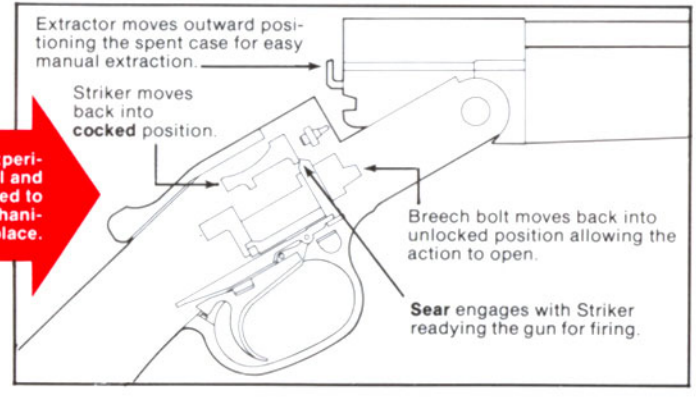
THE SEQUENCE OF MECHANICAL EVENTS PICTURED ARE IMPORTANT TO THE PROPER FUNCTIONING OF THIS FIREARM. INASMUCH AS THEY ARE ACCOMPLISHED BY A DIRECT AND POSITIVE MOVEMENT OF THE TOP LEVER, YOU MUST ALLOW THE LEVER TO EXPERIENCE FULL TRAVEL TO ITS STOP POSITION.

Study Photo "B" and its accompanying line drawing carefully. Note how the act of moving the top lever has prepared the gun for firing. **If you were to load the chamber at this point and close the action, the gun would be unsafe. It would be unsafe because, as of yet, you have not engaged the safety mechanism and there is no guard against accidental firing if the trigger is released. This safety mechanism was designed for your protection. It must be used.**

BEFORE LOADING THE TCR'87 AND CLOSING THE ACTION YOU MUST ENGAGE THE CROSS BOLT SAFETY TO GUARD AGAINST ACCIDENTAL DISCHARGE.



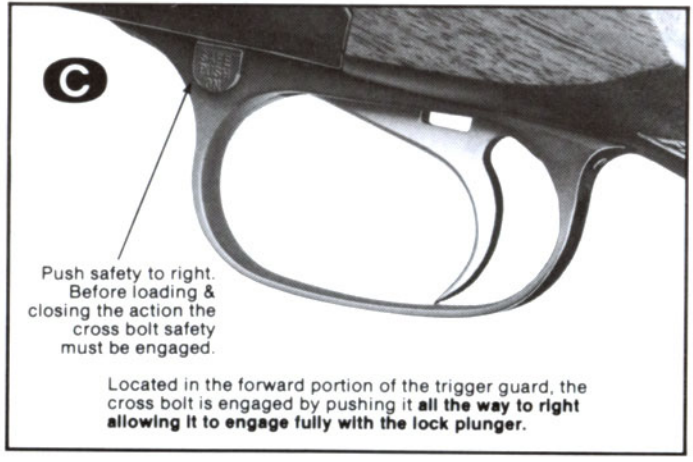
As the lever experiences its full travel and the action is allowed to open, these mechanical events take place.

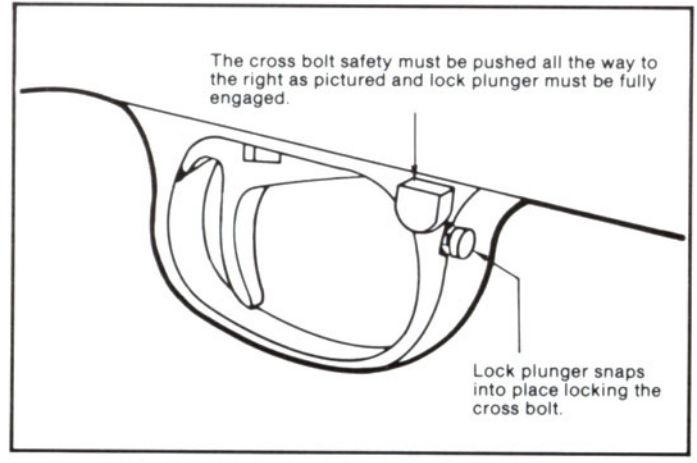

Extractor moves outward positioning the spent case for easy manual extraction.
Striker moves back into **cocked** position.
Breech bolt moves back into unlocked position allowing the action to open.
Sear engages with Striker readying the gun for firing.

ENGAGE THE CROSS BOLT SAFETY

Study Photo "C" with its accompanying line drawing. Reach forward and press the cross bolt safety, which is located in the front portion of the trigger guard, all the way to the right. Be certain that the cross bolt experiences full travel and that the lock plunger has snapped into its locking position. **When the safety is properly engaged you will not be able to return it to its "off" position by pressure on the cross bolt alone.** To return the safety to its "off" position will require a deliberate "two directional" release. Using both your thumb and forefinger, press in on the lock plunger as you push the cross bolt to the left ("off") position. Practice this operation until you have completely committed it to memory.

This safety device was designed for your protection.


C
Push safety to right. Before loading & closing the action the cross bolt safety must be engaged.
Located in the forward portion of the trigger guard, the cross bolt is engaged by pushing it **all the way to right allowing it to engage fully with the lock plunger.**

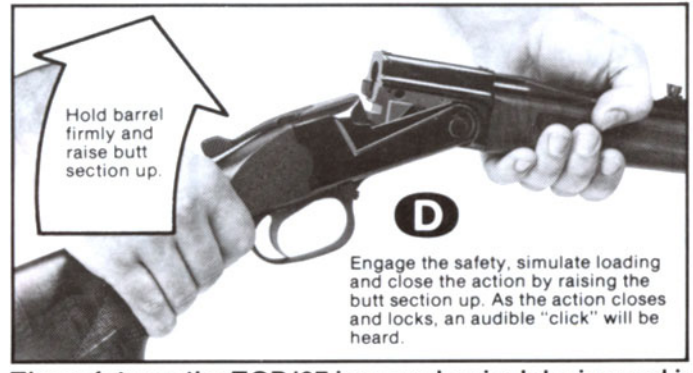

The cross bolt safety must be pushed all the way to the right as pictured and lock plunger must be fully engaged.
Lock plunger snaps into place locking the cross bolt.

Failure to use it or to use it improperly can result in an accidental discharge which can cause injury and/or death to yourself or others.

Be certain that the safety on your TCR'87 functions exactly as described in this instructional booklet. If the safety on your TCR'87 does not function in the proper manner, return the rifle to the Thompson/Center Service Department (see address on front cover). **Do not load or attempt to fire any TCR'87 which has a defective or altered safety device.**

Return the cross bolt to its "on" position (all the way to the right) and continue with simulated loading.

Once the safety is on you would normally load the firearm, so let's assume that you have done so. **DON'T ACTUALLY LOAD AND FIRE YOUR TCR'87 UNTIL YOU HAVE READ THROUGH THIS BOOKLET.** When loading the gun, the barrel is tilted slightly downward and a cartridge is inserted into the chamber in the conventional manner. The cartridge is pushed forward until its head contacts the extractor. Photo "D" shows the proper method of closing the action. Always close the action in the manner described by holding the barrel firmly and **pulling up on the receiver or butt section.** This assures that the cartridge will remain forward in the chamber and not be crushed in the closing of the action. Equally it provides time for internal parts to function in their proper sequence (breech bolt moves forward and engages with the barrel locking lug). Never "snap" the action closed. If the action does not close smoothly, remove the live round from the chamber and inspect the cartridge and chamber. If you are unable to recognize and correct the problem, have your TCR'87 examined by a qualified gunsmith. Forcing the action closed on a live round may cause accidental discharge. An accidental discharge can cause injury or death.


Hold barrel firmly and raise butt section up.
D
Engage the safety, simulate loading and close the action by raising the butt section up. As the action closes and locks, an audible "click" will be heard.

The safety on the TCR '87 is a mechanical device and is not foolproof. It is intended to be used in combination with common sense and safe gun handling practices. Do

not rely on the safety to overcome the danger of injury to yourself or others from careless handling or abuse of your TCR '87. Do not load the TCR '87 until you are ready to use it. Always keep the muzzle of your TCR '87 pointed downrange.

If the TCR '87 is dropped or struck a hard blow, the following steps should be taken. The action should be opened, the gun should be unloaded, the bore should be checked for obstructions, the action should be functioned to be sure that the safety and triggers work properly, and that there are not broken or deformed parts. If any problem or malfunction is noted, the firearm should be returned to the factory for service (see inside back cover).

HUNTER MODEL SINGLE TRIGGER

The Hunter Model TCR '87 is equipped with an adjustable single trigger, (see Photo "E"). This trigger is specifically designed to meet hunting requirements and provides a clean, crisp trigger pull which is preset at the factory.

Before loading your TCR'87, the shooter should become familier with this trigger and the amount of "pull" that is required to fire the gun. Continued or prolonged "dry firing" (dropping the firing pin on an empty chamber) can be detrimental to the mechanism and should be avoided.

It is recommended, however, that the new user "dry fire" the gun several times to familiarize himself with the trigger pull. **WITH THE CHAMBER UNLOADED,** move the safety to its "off" position. Carefully squeeze the trigger taking mental note of how much pressure is required to fire your TCR'87.

ALWAYS CARRY THE GUN WITH THE SAFETY IN THE "ON" POSITION. Remove the safety only when the muzzle is on target and the instant before firing. THE TRIGGER FINGER SHOULD NOT CONTACT THE TRIGGER UNTIL THE INSTANT OF FIRING!

Adjustable single trigger. Trigger pull pre-set at factory.
E
Safety remains in "on" position until the instant before firing.

The Hunter Model TCR '87 is equipped with an adjustable single trigger. Become familiar with this trigger before loading or using the firearm. **For your protection, the safety must be in its "on" position until the instant before firing. The trigger finger should not contact the trigger until the instant of firing.**

ADJUSTMENT OF THE SINGLE TRIGGER

The adjustment screw located behind the trigger guard controls the amount of sear and striker engagement. This regulates the amount of let-off travel when the rifle is being fired.

The single trigger on your TCR'87 Hunter Model was adjusted to our production standards before shipment. It was set to what we feel is an optimum let-off travel. If additional adjustment is required it **should be made with discretion.**

CAUTION: Too light an adjustment can cause premature firing which may result in injury or death to the shooter or bystanders. It may also interfere with the normal operation of the cross bolt safety.

In order to check the adjustment for let-off travel on your TCR'87 Hunter Model, the following procedure should be used.

Open the action to be sure the gun is unloaded. Close the action. Push the cross bolt safety to its "off" position. **Carefully turn the adjustment screw clockwise until the striker falls (action fires).** Stop turning the instant the striker falls. Do not turn the adjustment screw beyond this point for it indicates **the point of total disengagement of the sear and striker.** When stirker falls, **TURN THE ADJUSTMENT SCREW COUNTER CLOCKWISE ONE/HALF TURN. This is the minimum setting for let-off travel. If you require additional let-off travel, continue turning the screw counter clockwise until you reach the desired engagement up to a maximum of one full turn. In no event should the engagement be set at less than one/half turn counter clockwise from the point of total sear disengagement.** After this adjustment is completed, open the action to automatically reset the striker.

Check to insure that the safety moves "on" and "off" freely and that the action "opens" and "closes" properly. After this adjustment the cross bolt safety must move freely to "on" and "off" position. If the cross bolt safety does not work freely, then trigger adjustment screw must be turned counter clockwise to provide more sear engagement.

CHANGING BARRELS

With the action closed, loosen the forend screw and pull down on the forend until it detaches from the firearm. While holding the barrel firmly, open the action and allow the barrel to rotate downwards in a circular movement. This action will remove the barrel. To replace the barrel simply reverse the process. Be sure that the TCR'87 is unloaded before disassembling or changing barrels in order to prevent accidental discharge which may cause injury or death. Use barrels of Thompson/Center manufacture only which are marked with the cartridge designation and our company name.

MOUNTING IRON SIGHTS & SCOPES

TCR'87 Rifles and accessory rifle barrels are supplied less sights. **Light weight** barrels are drilled and tapped for both scope mounts and T/C iron sights. **Medium weight** barrels are drilled and tapped for scope mounts (see current catalog). TCR'87 Shotguns with field barrels are equipped with bead front sights. Slug Models are equipped with adjustable iron sights and are drilled and tapped for scope mounts.

Thompson/Center Arms and other scope mount manufacturers offer bases which are specifically designed to fit the TCR'87 factory hole spacing. **Do not drill additional holes in the barrel** as this could weaken its structure and contribute to a rupture causing injury and/or death to yourself or others.

BARREL OBSTRUCTIONS

Before loading the TCR '87, check the bore to insure that it is free of obstructions (cleaning patches, excess oil, mud, snow or other foreign materials). If the firearm is dropped it should be unloaded and inspected to insure that the bore has not become clogged with dirt, snow, twigs or other foreign material.

If, when firing, the report is weak or peculiar, stop immediately. **Inspect the bore for a stuck bullet or wad.** If the bore is obstructed, return the barrel to the factory. **Do not continue to fire the gun.**

FAILURE TO FIRE

If the TCR'87 fails to fire, keep the muzzle pointed at the target or in a safe direction for at least sixty (60) seconds. If the TCR'87 does not fire in sixty seconds, hold the gun **with the muzzle pointed in a safe direction and keep your face, head and body well away from the breech section as you open the action. Faulty or improperly reloaded ammunition can "hang fire" or ignite in an unpredictable manner causing serious injury.**

Extract and examine the cartridge. If the primer on the cartridge is indented, it should be disposed of in accordance with the ammunition manufacturer's instructions for faulty ammunition or in any safe manner. If the primer on the cartridge is not indented or only lightly indented, then your TCR '87 should be examined by a qualified gunsmith or returned to the factory for service under our warranty program.

LUBRICATION

Guard against malfunction and sludge build-up by using only dry lubricant such as graphite on the internal moving parts. Use gun oil or light machine oil to protect the outside surface.

SERVICE
Tel. 603-332-2333

Should your firearm require adjustment, repair or refinishing, we strongly recommend that it be returned to the factory. There is no other way to ensure that the work will be done by a competent staff of trained technicians.

Firearms returned to the factory should be **marked to the attention of the service department.** A letter of instructions should be enclosed with the firearm. Adherence to these suggestions will prevent loss of time and facilitate handling at the factory.

Our Service Department will give your gun a complete inspection. They will evaluate the problem or problems specified in your covering letter. If the work required is not covered by our "Lifetime Warranty" (see back cover) you will receive a **quotation which must be authorized by you.** No actual work will be done without your approval.

Ship complete rifles, barrels or receivers U.P.S. Barrels only may be sent parcel post or U.P.S.

STATEMENT OF LIABILITY

This firearm is classified as a **FIREARM OR DANGEROUS WEAPON** and is surrendered by us with the express understanding that we assume no liability for its resale or safe handling under local laws and regulations. Thompson/Center Arms assumes no responsibility for physical injury or property damage resulting from either intentional or accidental discharge, or for the function of any gun subject to influences beyond our control, and will honor no claim which may result from carless handling, unauthorized adjustments, defective or improper ammunition, corrosion or neglect.

For your protection, examine your rifle carefully at the time of purchase. Fill out and mail the registration card promptly. Be certain that you indicate the actual serial number of your TCR'87 as stamped on the receiver.

TCR'87 Rifles, Shotguns, or accessory barrels which are subjected to custom alteration or conversion other than those performed by the Thompson/Center Custom Shop are not covered by this warranty,. **Thompson/Center does not endorse or recommend any type of custom alteration other than those performed by the Thompson/Center Custom Shop.** Responsibility for other conversions rests solely with the gunsmith performing the conversion. If this work is done improperly or without proper judgement, the firearm can rupture or malfunction causing injury or death to the shooter or bystanders.

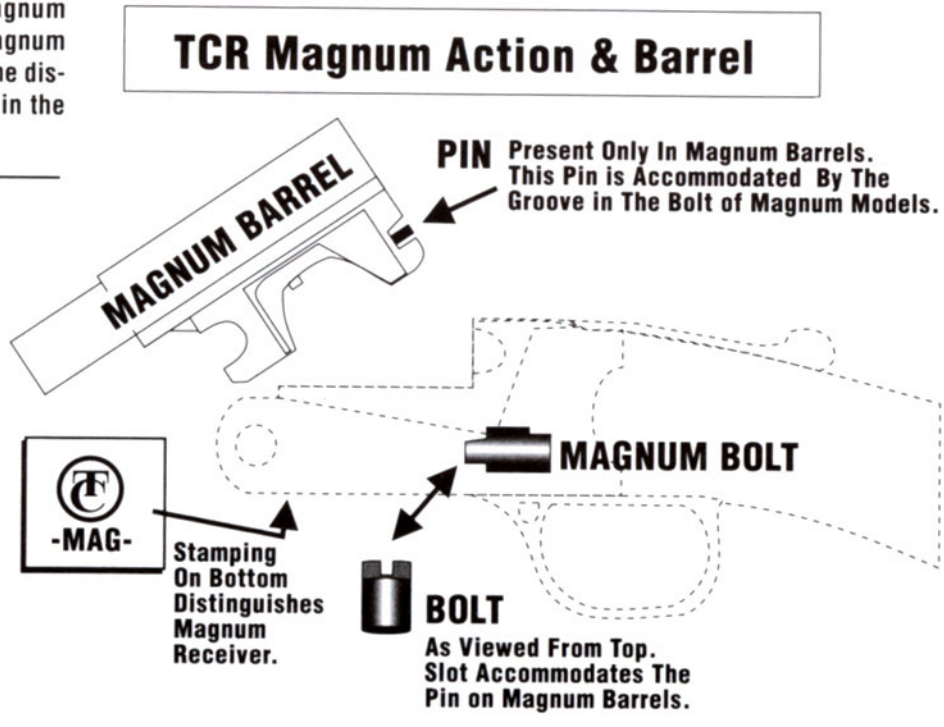
The TCR Hunter Models have Magnum Receivers and will accomodate magnum barrels. They can be identified by the distinguishing characteristics shown in the diagram to the right. These are:

❑ A Stamp that shows the T/C logo and the word - MAG -.

❑ The locking bolt with a vertical slot in it to accommodate the barrel pin.

❑ The barrel with a pin that is accommodated by the vertical slot in the bolt.

❑ *Receivers marked "MAG" will accept any TCR '83 or '87 barrel. Non-magnum receivers <u>WILL NOT</u> accept magnum barrels.*


TCR Magnum Action & Barrel
MAGNUM BARREL
PIN
Present Only In Magnum Barrels. This Pin is Accommodated By The Groove in The Bolt of Magnum Models.
MAGNUM BOLT
-MAG-
Stamping On Bottom Distinguishes Magnum Receiver.
BOLT
As Viewed From Top. Slot Accommodates The Pin on Magnum Barrels.

LIMITED WARRANTY

Thompson/Center Arms warrants this firearm for the **LIFETIME OF THE ORIGINAL CONSUMER PURCHASER**. Any firearm or part thereof returned, postage paid, to the factory at Rochester, New Hampshire 03867, will be repaired or replaced, to our commercial standard free of charge, and returned to the consumer purchaser postage prepaid. This warranty is established by return of our authorized warranty card which should be done within thirty (30) days of purchase. **THIS WARRANTY DOES NOT COVER ANY DAMAGE CAUSED BY CUSTOM ALTERATION OF THE FIREARM**. Thompson/Center Arms reserves the right to refuse to repair or replace firearms, or parts thereof, damaged by abuse or misuse.

This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

Address all correspondence and inquires to:

Thompson/Center Arms Co., Inc.,
Farmington Road, P.O. Box 5002,
Rochester, New Hampshire 03867

Note: This Model is Out of Production.
For Reference Use Only.